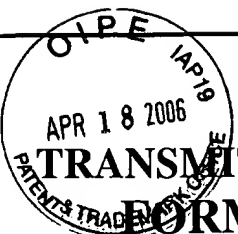
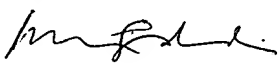



AF 2667 ZPW

 <p>TRANSMITTAL FORM</p> <p>(to be used for all correspondence after initial filing)</p>		Application Number		09/944,892	
		Filing Date		August 31, 2001	
		First Named Inventor		Remboski, et al.	
		Group Art Unit		2667	
		Examiner Name		Afsar M. Qureshi	
Total Number of Pages in this Submission		Attorney Docket Number		IA00002	

ENCLOSURES			(check all that apply)
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-Related papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CDs _____	<input type="checkbox"/> After Allowance Communication to a Technology Center (TC) <input checked="" type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC {Appeal Notice, Brief, Reply Brief} <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter with appropriate copies <input type="checkbox"/> Other Enclosure(s) (please identify below)	
Remarks			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
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Date	April 13, 2006		

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Typed or printed name	Sheila Mannerino
Signature	
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Dated: April 13, 2006

Signature: *[Handwritten Signature]*

Docket No.: IA00002
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Donald J. Remboski et al.

Application No.: 09/944,892

Confirmation No.: 4080

Filed: August 31, 2001

Art Unit: 2667

For: Vehicle Active Network
With Reserved Portions

Examiner: Afsar M. Qureshi

AMENDED APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicants file this Amended Appeal Brief in accordance with 37 C.F.R. § 41.37(d) as required by the Notification of Non-Compliant Appeal Brief mailed March 15, 2006.

No fee is believed to be required with this submission.

This Amended Appeal Brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- I. Real Party In Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Issues to be Reviewed on Appeal
- VII. Argument
- VIII. Appendix A – Claims
- IX. Appendix B – Evidence Appendix
- X. Related Proceedings Appendix (not applicable)

I. Real Party In Interest

The real party in interest is Motorola, Inc. the assignee of the above-identified patent application. The assignment assigning rights to Motorola, Inc., is recorded in the United States Patent and Trademark Office ("USPTO") at Frame 012537 of Reel 0643.

II. Related Appeals and Interferences

There are no related interferences.

The following case was allowed, without comment by the Board, after filing an appeal brief:

Serial number 09/943,921 entitled VEHICLE ACTIVE NETWORK WITH BACKBONE STRUCTURE;

An appeal against the rejection of the claims in each of the following related patent applications has been filed:

Serial number 09/943,870 entitled Vehicle Active Network with Communication Path Redundancy;

Serial number 09/943,882 entitled Vehicle Active Network with Fault Tolerant Devices; and

Serial number 09/944,893 entitled Vehicle Active Network with Data Encryption.

III. Status of Claims

Currently, claims 1-9 and 11-21 are pending in the application. The pending claims are presented in Appendix A to this Brief. Claims 1-9 and 11-21 stand rejected and form the subject matter of this appeal

A. History

The application was originally filed on August 31, 2001, with claims 1-21.

B. Current Status of Claims

1. Claims canceled: 10
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-9, 11-21
4. Claims allowed: None
5. Claims rejected: 1-9, 11-21

C. Claims on Appeal: 1-9, 11-21

IV. Status of Amendments

No amendments have been filed since the Final Office Action dated December 10, 2003.

V. Summary of Claimed Subject Matter

The present application relates to communication architecture in a vehicle, and more particularly, the present application relates to a vehicle that incorporates an active network architecture, wherein the active network architecture incorporates a reserved capacity portion. The following citations to the written description and drawings are provided in accordance with 37 C.F.R. § 41.37(v) to illustrate support for the claimed limitation. Support for the claim limitations may be found at other places in the written description and drawings, and furthermore, these exemplary citations to the written description and drawings are not limiting of the claimed subject matter.

Claim 1 recites a vehicle (Fig. 1, 10) comprising a first device (Fig. 7, 46), a second device (Fig. 7, 48), an active network (Fig. 7, 36), wherein the active network communicatively couples the first and second devices, the active network having an overall communication capability (Fig. 7, 38) and a portion (Fig. 7, 64) of the overall communication capacity begin reserved for communication usage by the first device. (Page 11, line 19 – page 13, line 22).

Claim 11 recites in a vehicle (Fig. 1, 10) comprising an active network (Fig. 7, 36) for communicating data between a first device (Fig. 7, 46) and a second device (Fig. 7, 48) within the vehicle, the active network comprising a data interface (Fig. 1, 22-28) to each of the first device and the second device for coupling the first device and the second device, respectively, to the active network, wherein the data interface operates to accept data from or deliver data to the device, respectively, independently of the functionality of the respective device (Page 7, lines 11-22), a plurality of coupled active network elements (Fig. 7, 38) coupling the interfaces, and a portion (Fig. 7, 64) of the active network elements, the portion being reserved for communication usage by the first device. (Page 11, line 19 – page 13, line 22).

Claim 18 recites in a vehicle (Fig. 1, 10) comprising an active network (Fig. 7, 36), a method of communicating data between a first device (Fig. 7, 46) and a second device (Fig. 7, 48) within the vehicle. The method comprises communicatively coupling the devices utilizing a data transport medium (Fig. 7, 38) having the active network, the data transport medium defining a plurality of potential communication paths between the first device and the second device; reserving a portion (Fig. 7, 64) of the plurality of potential communication paths for communications from or to the first device; transporting data from or to the first device using the data transport medium inclusive of the portion; and transporting data from or to the second device using the data transport medium exclusive of the portion. (Page 11, line 19 – page 13, line 22).

V. Issues To Be Reviewed On Appeal

The issue presented on appeal is:

Whether claims 1-9 and 11-21 are patentable over the combination of Matsuda et al (U.S. Patent No. 5,499,247, hereinafter “Matsuda”) in view of Bertin et al (US Patent No. 5,940,372, hereinafter “Bertin”) where the references and hence the resulting combination of the references fail to teach or suggest an active network structure.

VII. Argument

Claims 1-9 and 11-21 are patentable over Matsuda in view of Bertin.

In the final Office action dated December 10, 2003, the examiner states “Matsuda et al discloses an automobile multiplex transmission system comprising ... an active network,” but “does not disclose ... the active network having an overall communication capability and a portion of the overall communication capability being reserved for communication usage by the first device.” However, the examiner asserts “Bertin et al discloses a system for selecting a path comprising ... the active network (200) having an overall communication capability and a portion of the overall communication capability being reserved for communication usage by the first device (202).” Responsive to the applicants’ argument that neither Matsuda et al nor Bertin et al disclose an active network, the examiner replied “the Affiant misinterpreted the reference of Bertin et al ... the network disclosed by Bertin et al is indeed an active network; each node 200-208 in Fig. 2 is aware of the messages transported and

performs the conversions required to transport the users [sic] data flow across the network (see column 7, line 53-63); moreover, it is clear the network is not passive, since there is no central server in the network to manage the nodes 200-208.”

First, it is useful to understand what the applicants mean by the term “active network.” Those of ordinary skill in the art know perfectly what an active network is, what an active network does and how to realize an active network. This is not an arbitrary assumption made by the attorney, but is based on the Affidavit under 37 CFR 1.132 made by Juergen Reinold, one of the inventors who is also an expert in the field of computing and networking, copy attached Appendix B-I. Attached also herewith is further evidences in the Appendices B-II, B-III and B-IV in the form of technical references and articles, written by third parties with no link to the present patent application. These additional references and articles demonstrate that an active network is a name used for recognizing a very particular kind of network.

Owing to the fact that applicant does not provide a special definition of the term “active network”, such term must be given its plain meaning, i.e. it must be read as it would be interpreted by those of ordinary skill in the art. In any case, the broadest reasonable interpretation must be consistent with the specification and must also be consistent with the interpretation that those skilled in the art would reach. See MPEP § 2111.01: “during examination the pending claims must be given their broadest reasonable interpretation consistent with the specification ... the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach” The interpretation of the term “active network” given by those of ordinary skill in the art is clear (see the aforementioned Affidavit and attached references): an active network is a network including nodes capable of performing custom operations on the messages that pass through the nodes; does not require a central server or computing resource; are aware of the contents of the messages transported and can participate in the processing and modification of the message while they travel through the network.

Initially, it appears that the examiner agrees with the applicants’ argument that Matsuda do not teach an active network and that such teaching must be found elsewhere in that in response to the applicants’ contention that neither Matsuda or Bertin teach an active network the examiner points only to Bertin to support the contention that an active network is disclosed. Thus, the rejection remains based upon the combination of the Matsuda in view of

Bertin, but the contention is now that Matsuda must be modified to incorporate the active network disclosed by Bertin. For the reasons below, the applicants maintain that Bertin do not disclose an active network, and even if it does disclose an active network, there is no suggestion or motivation to modify the system of Matsuda to incorporate an active network if such is taught by Bertin.

A. Matsuda do not teach an active network

Alleged by the examiner is that Matsuda "discloses ... an active network (18)." The network (18) is not an active network. Only if one considers the term "active" as a simple adjective to the word "network"; in this light, an "active network" is a network capable of doing any kind of action, does it follow that the network of Matsuda is an active network. Following such an interpretation, however, every network is an active network, due to the fact that every network is at least able of establishing a connection. Thus it is impossible to claim a network which is not active with this meaning (a non-active network must be a network which does not do anything, and thus it is a completely unuseful network), this interpretation leads to the word "active" conferring no kind of limitation to the word "network".

What Matsuda clearly disclose, however, is that the network (18) is a multiplex bus. If we try to give to the term "active network" the aforementioned meaning given by the examiner, i.e., a multiplex bus is an active network, it is clear that to do so gives a meaning that is not consistent with the interpretation that those skilled in the art would reach with respect to the term active network. Furthermore, we are giving to the term "active network" a meaning that is not consistent with the specification: according to this meaning, e.g., a BUS network is an active network, but in the specification it is clearly stated that a BUS network is not an active network. Both such considerations demonstrate without any doubt that this interpretation does not conform with what one of ordinary skill in the art would understand an active network to be and is inconsistent with the teachings of the specification.

Bertin teach only a method of determining a route between an origin node and a destination node for transmission of packets within a packet data network using a weighting algorithm. This network is a passive network and not an active network. The links cannot perform custom operations on messages passing through them within the network. In addition, the nodes are not aware of, and cannot participate in the processing or modification of the contents of the messages passing through them.

The examiner argues that the access nodes 202 by virtue of their functionality to link external devices supported by standard interfaces to the network make the network an active network. This is incorrect. The access nodes only provide conversion of the data from the external device as the data enters the network, not as it is communicated through the network. Moreover, this conversion is based upon the standard interface. The data is not modified or acted upon based upon the data within the message itself. In that regard, there is no teaching or suggestion that the nodes are aware of the contents of the messages or act upon the data contained within the packet. Instead, there is only a suggestion that the access node converts the data, regardless of the content, for communication by the network. Nowhere in Bertin is the network described as being capable of performing custom operations on the messages that pass through the nodes; being aware of the contents of the messages transported or being able to participate in the processing and modification of the message while it travels through the network.

Thus, Bertin do not teach an active network.

C. The combination of Matsuda and Bertin does not render the claimed invention unpatentable

Knowing that Matsuda do not teach an active network, not only must that teaching be found elsewhere, but to establish a *prima facie* case of obviousness, and hence to find the claims 1-9 and 11-21 unpatentable under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based upon applicant's disclosure. MPEP at § 2142.

Of course, as discussed above, the applicants contend that Bertin also do not teach an active network. Hence it follows that the combination of Matsuda and Bertin does not teach an active network, a vehicle incorporating an active network or an active network with a portion being reserved for communication usage by a particular device. Hence, the claims 1-9 and 11-21 are patentable over the combination.

Notwithstanding that Bertin fail to teach an active network, the applicants admit that active networks are known. See Appendices B-I; B-II, B-III and B-IV. What is not taught or suggested in the art, and what the combination does not establish, is a suggestion or motivation to use an active network in a vehicle. That comes only from the applicants' own specification, and is inappropriate hindsight. Careful analysis of the cited references reveals no such suggestion. There is no suggestion in Matsuda to use any other network structure than that taught therein. Bertin is not directed to vehicle applications at all, and the special requirements of vehicle applications in relation to reliable and guaranteed message delivery or failsafe considerations are not addressed or even considered. Nor do the references cited by the applicants suggest use of an active network in a vehicle. It is only by the applicants' disclosure is one first taught to make the combination of a vehicle and an active network. The examiner has failed to point to the motivation or suggestion contained within the references for making the modification or combination. MPEP § 2142.

Because there is no suggestion or motivation in the references themselves to combine a vehicle and an active network, it follows that claims 1-9 and 11-21 are patentable.

VIII. Claims Appendix

See attached Appendix – A.

IX. Evidence Appendix

See attached Appendix – B containing:

B-I: Affidavit Pursuant to 37 CFR § 1.132 of Juergen Reinold, September 24, 2003.

B-II: Tennenhouse, et al, Towards an Active Network Architecture,
<http://www.tns.lcs.mit.edu/>, January 1996.

B-III: Tennenhouse, et al, A Survey of Active Network Research, IEEE
Communications Magazine, January 1997.

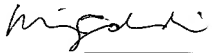
B-IV: DARPA, Active Networks,
<http://www.darpa.mil/ata/programs/activenetworks/smartpacks.htm>.

X. Related Proceedings Appendix

There are no related decisions rendered by a court or the Board in any proceeding
identified in Section II, above.

Respectfully submitted,

Reinold, et al.

by: 
Indira Saladi
Attorney for Applicant
Registration No. 45,759
Phone: (847) 576-6735
Fax: (847) 576-0721

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 09/944,892

1. (previously presented) A vehicle comprising:
 - a first device;
 - a second device;
 - an active network, wherein the active network communicatively couples the first and second devices, the active network having an overall communication capability and a portion of the overall communication being reserved for communication usage by the first device.
2. (original) The vehicle of claim 1, the portion being exclusively reserved for the first device.
3. (original) The vehicle of claim 1, wherein an unreserved portion of the overall communication capability is shared by each of the first and second devices.
4. (original) The vehicle of claim 1, wherein the portion comprises a plurality of communication paths between the first device and the second device.
5. (original) The vehicle of claim 1, wherein the portion is reconfigurable.
6. (original) The vehicle of claim 5, wherein the portion is reconfigurable responsive to a condition of the active network.

7. (original) The vehicle of claim 6, wherein the condition is one of over-capacity and under-capacity.

8. (original) The vehicle of claim 6, wherein the condition is a failure in the active network.

9. (original) The vehicle of claim 1, wherein the active network comprises a packet data network.

10. (cancelled) The vehicle of claim 1, wherein the active network comprises a plurality of active network elements coupled by connection media, and wherein each of the plurality of active network elements is selected from the group of active network elements comprising: a bridge, a switch and a router.

11. (previously presented) A vehicle comprising an active network for communicating data between a first device and a second device within the vehicle, the active network comprising:

a data interface to each of the first device and the second device for coupling the first device and the second device, respectively, to the active network, wherein the data interface operates to accept data from or deliver data to the device, respectively, independently of the functionality of the respective device;

a plurality of coupled active network elements coupling the interfaces; and
a portion of the active network elements, the portion being reserved for communication usage by the first device.

12. (original) The active network of claim 11, wherein the portion is exclusively reserved for the first device.

13. (original) The active network of claim 11, wherein the portion includes a plurality of communication paths between the first device and the second device.

14. (original) The vehicle of claim 11, wherein the portion is reconfigurable.

15. (original) The vehicle of claim 14, wherein the portion is reconfigurable responsive to a condition of the active network.

16. (original) The vehicle of claim 15, wherein the condition is one of over-capacity and under-capacity.

17. (original) The vehicle of claim 15, wherein the condition is a failure in the active network.

18. (previously presented) In a vehicle comprising an active network, a method of communicating data between a first device and a second device within the vehicle, the method comprising:

communicatively coupling the devices utilizing a data transport medium having the active network, the data transport medium defining a plurality of potential communication paths between the first device and the second device;

reserving a portion of the plurality of potential communication paths for communications from or to the first device;

transporting data from or to the first device using the data transport medium inclusive of the portion and

transporting data from or to the second device using the data transport medium exclusive of the portion.

19. (original) The method of claim 18, wherein the step of reserving a portion of the data transport medium comprises reserving at least one communication path between the first device and the second device.

20. (original) The method of claim 18, further comprising the step of reconfiguring the portion.

21. (original) The method of claim 18, further comprising the step of reconfiguring the portion responsive to a condition of the active network.

APPENDIX B

Evidence Appendix

B-I: Affidavit Pursuant to 37 CFR § 1.132 of Juergen Reinold, September 24, 2003.

B-II: Tennenhouse, et al, Towards an Active Network Architecture,
<http://www.tns.lcs.mit.edu/>, January 1996.

B-III: Tennenhouse, et al, A Survey of Active Network Research, IEEE
Communications Magazine, January 1997.

B-IV: DARPA, Active Networks,
<http://www.darpa.mil/ata/programs/activenetworks/smartpacks.htm>.